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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,613	10/22/2003	Takashi Suzumura	032218-018	4820
21839	7590	01/06/2006	EXAMINER	
BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			LARSON, LOWELL A	
			ART UNIT	PAPER NUMBER
			3725	

DATE MAILED: 01/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/689,613

Applicant(s)

SUZUMURA ET AL.

Examiner

Lowell A. Larson

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7 to 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7 to 10, 20 to 22, 24, 26 to 28, 31 and 32 is/are rejected.
- 7) ☒ Claim(s) 11 to 19, 23, 25, 29 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/09/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

2. Claims 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese 50-86469 (IDS citation).

Figures 1 and 2 disclose manufacture of a flanged carrier 1 for rotating bodies 41 by the method recited in these claims.

Applicant's remarks in the response filed October 28, 2005 have been noted but are considered to be moot in view of the new grounds of rejection.

***Claim Rejections - 35 USC § 103***

3. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over 50-86469 in view of Cox (of record).

These claims require grooved bending guides. Cox discloses the use of such grooved bending guides and advises that the bends are more easily made.

It would have been obvious to one having ordinary skill in the art to provide grooved bending guides in the flange-forming of 50-86469, following the suggestion of Cox, in order to facilitate the bending.

4. Claims 20, 26 to 28, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaeffler (newly cited) in view of Lee et al. (of record).

These claims require forming a flanged carrier for rotating bodies by flanging or bulging a tubular blank. Schaeffler discloses carrier 1 for rotating bodies 6 in which the flanges are formed by flanged-over rims of a cylindrical sleeve.

Lee et al, discloses forming flanges by bulging the central portion of a cylindrical sleeve with the use of mandrels 56, 57.

It would have been obvious to one ordinarily skilled in the art to perform the flanging-over of the Schaeffler rotating body carrier by bulging the central portion of a cylinder, as shown by Lee et al., in order to accurately shape the flanges.

5. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaeffler in view of Lee et al. as applied to Claim 20, above, and further in view of Cox.

These claims require the presence of a bending guide groove. Cox shows the use of such bending grooves are well known in order to facilitate bending. It would have been further obvious to provide guide grooves when forming the Schaeffler flanges, following the suggestion of Cox, in order to reduce the bending forces.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

No clear antecedent basis is found for "the openings" in this claim.

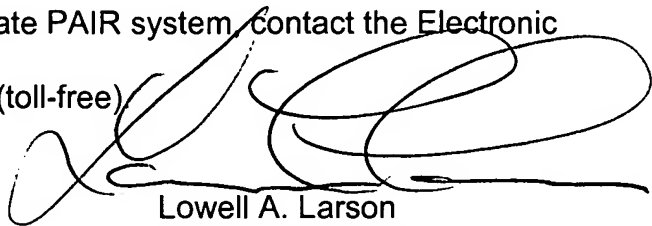
**Conclusion**

8. Claims 11 to 19, 23, 25, 29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lowell A. Larson whose telephone number is (571) 272-4519. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Banks Derris can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'L. Larson', written over a horizontal line.

Lowell A. Larson  
Primary Examiner  
Art Unit 3725

LAL  
January 4, 2006